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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
02/03/99	12/30/97	AMARASEKERA	J 60SI-1890

IM81/0203

ENTER IN ANDR BOX
SI CLASSIFIED
FOR CLASSIFIED INVENT
PITTSFIELD MA 01201

EXAMINER

LU RUTT, C

ART UNIT

PAPER NUMBER

1713

DATE MAILED: 02/03/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/000,824

Applicant(s)
Amarasekera et al.

Examiner
Caixia Lu-Rutt

Group Art Unit
1712



☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-16 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-16 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 3

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - (i) Page 12, lines 11-13, the sum of the 99.02% dimethylsiloxane unit and the 0.08% methylvinylsiloxane unit is not 100%, is there some missing components?
 - (ii) Page 12, line 21, the unit after "0.88" is missing; and
 - (iii) Page 12, lines 9-13 and page 14, lines 9-13, the phrases used to defined the "diorganosiloxane gum" are in the brackets, "[" and "]". The content in the brackets indicates the content needed to be deleted in the Office. Since the contents within the brackets seem pertain to the disclosure, the applicants is reminded to clarify their intentions.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dams (US 4,355,129) in view of Milbert (US 3,821,140) or Milbert in view of Dams.

The instant claims are directed to a composition for high voltage insulation comprising a silicone polymer, a reinforcing filler, an anti-tracking agent and flame retardant, a coupling agent, a

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curing agent, an extending filler, a processing fluid, and optionally, a mold release agent, a coloring agent or heat resistive agent.

CL 7/1/49 Dams teaches a composition for high voltage insulation comprising a silicone polymer (col. 1, line 50 to col. 2, line 20), a reinforcing filler polymer (col. 2, line 25), an anti-tracking and flame retardant agent (col. 3, lines 2⁰₁-28), a coupling agent (col. 2, lines 38-49), a curing agent (col. 2, line 62 to col. 4, line 5), an extending filler agent (col. 2, line 24-28), a processing fluid (col. 2, lines 16-17 and 43-44), a mold release agent (col. 2, lines 16-17 and 43), a coloring agent (col. 3, lines 32-37), and heat resistant agent (col. 3, lines 21-23). *is this the silicone oil*

Although Dams' silicone polymer contains dimethyl siloxy, methylvinyl siloxy and alkylhalogenoalkyl siloxy units, Dams does not particularly teach the silicone polymer containing hydroxy or alkoxy ending group.

Milbert teaches a polysiloxane composition for electric insulation material comprising all the components as claimed in the instant claims except the alumina trihydrate anti-tracking agent (col. 1, line 35 to col. 4, line 10 and Examples).

Alumina trihydrate is one of the most preferred anti-tracking agents used in the high voltage insulation silicone material.

When the silicone polymer containing both vinyl and alkoxy/hydroxy groups, the silicone polymer can bond with the coupling agent through condensation and free radical polymerization reaction, the silicone polymer might also react with the oxide-type filler directly to enhance the bonding with the filler.

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Thus, it would have been obvious for a skilled artisan at the time the invention is made (i) to add Dams' alumina trihydrate to Milbert's composition to provide a high voltage insulation material with much improved anti-tracking property; or (ii) to employ Milbert's silicone polymer in Dams' composition to provide a high voltage insulation material with improved bonding between the silicone polymer and the fillers such as silica and alumina.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Caixia Lu-Rutt whose telephone number is (703) 306-3434. Any Fax communication for this application should be sent to (703) 305-5408.



Robert Dawson
Supervisory Patent Examiner
Technology Center 1700

CL

February 1, 1999